

1 **TITLE OF INVENTION**

2
3 THE GLUE TOTE

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5 **CROSS REFERENCES TO RELATED APPLICATIONS**

6
7 None

8 **STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH**

9
10 No federal research money was used in the development of this
11
12 invention.

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14 **REFERENCE TO APPENDIX**

15
16 No appendix accompanies this application

17
18 **BACKGROUND OF THE INVENTION**

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20 Certain tradesman, particularly construction workers, are
21
22 required to bring various materials to job sites. Sometimes the
23
24 necessary equipment is in bags, bottles, rolls or cans. This
25
26 device allows the worker to carry two same sized cans in a handy
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28 carrying device. This application will describe how a plumber for
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30 instance will use the device.

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32 Most plumbers are very familiar with PVC (Polyvinyl Chloride)
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34 piping or coated PVC. It is lightweight, very durable and is very
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36 commonly used in houses and outdoor applications such as
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38 irrigation systems. However, in order to connect the PVC together
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40 the plumber must apply both a cleaner and a glue to the pipe in
41
42 order to make a secure and tight fit of the pieces of PVC piping.

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44 Without the use of the glue and the cleaner the piping
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46 becomes brittle and fails. The material that is used to clean and
47
48 glue the pipe together are liquids, which are applied to the PVC
49
50 to connect the piping. These materials (cleaner and glue) are

1 stored in cans- pint size, quart size, or even gallon or drum
2
3 size. Usually a plumber carries a pint or quart size can to a job
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5 site due to convenience and ease of transport.
6

7 At times plumbers like construction workers are required to
8
9 work in cramped outdoor spaces particularly in ditches when they
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11 are connecting the PVC piping. The environment is dirty and often
12
13 has uneven surfaces. One of the risks in the field for the
14
15 plumber is that the plumber may accidentally knock the can of
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17 cleaner or glue over. This results in waste of the product and
18
19 waste of time for the plumber.
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21 Since both the cleaner and the glue must be applied to the
22
23 PVC pipe in order to make a secure fit, the plumber must carry at
24
25 least two cans - one for the cleaner and one for the glue.
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27 The purpose of this invention is to ensure that a plumber,
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29 for instance, can carry either a pint or quart size can of the
30
31 glue and the same size can of cleaner to the job site at one time
32
33 in a handy carrying device. The cans are securely attached on the
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35 bottom of the device in a recessed concentric circles and clamped
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37 on the top of the can lid with a recessed groove on a spring-
38
39 loaded clamp. The recessed groove, which is on the underside of
40
41 the clamp fits over the top of the can. A T handle on the top of
42
43 the device allows the plumber to carry the device.
44

45 The typical can of glue and cleaner has an applicator in the
46
47 middle of the can. The applicator is inserted into the liquid and
48
49 allows the cleaner or the glue to be applied to the pipe. The
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1 plumber removes the applicator from the respective can, applies
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3 the particular material (either cleaner or glue), and then
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5 securely puts the applicator back in the appropriate can. It is
6
7 very important to prevent foreign material from entering the can
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9 with the glue or the cleaner. It is also very important that the
10
11 can of cleaner or glue remain as airtight as possible. Both the
12
13 presence of foreign material and air will destroy the cleaner and
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15 glue.

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17 The bottom surface of the base of the device is a flat
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19 surface, which allows the plumber to rest the device on any
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21 surface. The downward pressure of the spring between the handle
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23 and the clamp of the device would ensure that both cans remain in
24
25 place in the device.

26
27 This device may be used in any application where two cans
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29 must be carried at once. This is not particularly limited to the
30
31 plumbing trade, but may also be used in other construction trades,
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33 woodworking facilities or any application where cans must be
34
35 carried to a job site. The example of the plumber in this
36
37 application was used solely for illustration purposes.

38 39 40 **BRIEF SUMMARY OF THE INVENTION**

41
42 This is a device, which allows two cans, either pint or quart
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44 sized to be carried at one time in a secure fashion. The bottom
45
46 of the device is either aluminum or molded plastic. A spindle in
47
48 the center of the device is screwed into a tapped and threaded
49
50 hole in the bottom or base of the device at one end and secured at

1 the other by a hex nut. The spindle is threaded at both ends to
2
3 achieve that result.
4

5 Between the handle and the base of the device is a clamp, which is
6
7 used to secure the pint or quart size cans to the device. On the
8
9 underside of the clamp recessed grooves are provided. These
10
11 grooves fit over the lip of the cans.
12

13 A spring is located between the underside of the handle and
14
15 the top surface of the clamp of the device. On the point of
16
17 contact with the top of the cans the clamp has a recessed or
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19 grooved lip, which allows the clamp to fit over the lip of the
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21 container. The downward pressure of the spring insures a secure
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23 fit. On the sides of the clamp are two pieces of stock, which
24
25 extend perpendicular from the sides of the clamp and allow the
26
27 user a convenient device to pull the clamps off the cans.
28

29 On the top surface of the base of the device are recessed
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31 rings, which are the diameter of a pint and a quart sized can.
32
33 This will ensure that the cans will not slip during normal
34
35 operation as it is being clamped and helps to insure that the cans
36
37 remain in place during normal use.
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39 A "T" handle at the top of the spindle, which is secured by a
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41 hex nut, provides an easy means to carry the device.
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BRIEF DESCRIPTION OF THE DRAWINGS

This is a device to carry two cans at one time in a secure fashion. The device is depicted as shown by the following drawings:

Figure 1 is an exploded view of the invention

Figure 2 is a front view of the invention

Figure 3 is a back view of the invention

Figure 4 is a right side view of the invention

Figure 5 is a left side view of the invention

Figure 6 is a top view of the invention

Figure 7 is a bottom view of the invention

Figure 8 is an exploded view of the invention depicted from the bottom

DETAILED DESCRIPTION

According to Figure 1 this device consists of a bottom or base section (100), a clamp (200), a spindle, which is threaded on both ends (300), a spring (400) and a T handle (500). The bottom section (100) is approximately 11 $\frac{3}{4}$ " inches long by one-half inch thick. The bottom section has a width of approximately 4 $\frac{3}{8}$ " inches. Figure 8 is an exploded view of the device and shows the recessed grooves (220) on the underside of the clamp (200).

In the center of the base section there is a tapped and threaded hole, which is approximately one-half inch in diameter (600) (Figure 1).

One end of the threaded spindle (300), is screwed into the hole (600) on the bottom section. The spindle (300) extends through a hole in the center of the clamp (200) and through a hole in the center (510) of the T handle (300). It is secured in place by a hex nut (700).

On the top of the bottom or base section (600) two recessed concentric circles (800 and 900) are formed on the top surface of the base section. These concentric circles allow a quart and pint jar to be securely positioned in the device. According to Figure 1, a pint size and quart size can have been drawn to demonstrate the placement within the recessed concentric circles.

The recessed concentric circles (800, 900) are slightly greater than the diameter of the bottom of each of the size cans so that the cans will fit securely in the respective recessed

1 concentric circle on the top surface of the base section of the
2
3 device. The concentric circles are recessed to a depth of .187
4
5 inches for the quart size and .375 inches for the pint size can.
6

7 There are two sets of identical recessed concentric circles
8
9 on each side of the base section as depicted in Figure 1 and are
10
11 equally spaced from the midpoint of the base section. Figure 6
12
13 shows a pint size can in place and the recessed ring for the quart
14
15 size can.

16
17 A spindle, which is secured in the hole at the bottom of the
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19 base section as depicted in Figure 1 (600) is inserted into the
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21 hole (600) which has been tapped and threaded in the center of the
22
23 base section and the spindle is secured at the top by a hex nut
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25 (700). The spindle is approximately 8 ½" inches long and is
26
27 threaded at both ends.

28
29 The device may be made from a variety of materials, but
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31 stainless steel is preferable because it is non-corrosive and
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33 durable. It may also be made from aluminum or molded plastic
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35 depending on the specific needs of a job.

36
37 The spindle is screwed into the hole (600) in the middle of
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39 the base section and is inserted through the hole in the center of
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41 the clamp (200) and through the hole in the center of the T
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43 handle (500). A spring (400) is inserted over the spindle and is
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45 positioned between the top surface of the clamp and the bottom
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47 surface of the T handle.

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49 The T-shaped handle (500) is approximately 5" inches in
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1 length. This will allow the tradesman to pick up this device with
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3 one hand.

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5 Between the T-handle and the base section there is a clamp
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7 (200) (Figure 1). A hole in the middle of the clamp allows the
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9 spindle to pass through the center of the clamp. The hole in the
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11 middle of the clamp is approximately one-half inch in diameter.
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13 The spindle is inserted through the middle of the clamp. The
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15 clamp freely moves up and down in a vertical fashion once the
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17 device is assembled. The clamp is approximately $2 \frac{3}{16}$ inches in
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19 length. The clamp is equipped with one inch (210) rods, which are
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21 inserted into a hole, which has been tapped and threaded on each
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23 side of the clamp. A lock nut (215) secures the rods (210) in
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25 place. These rods allow the tradesman to pull the clamp up and
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27 remove the can(s) easily. The rods (210) extend approximately one
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29 inch from the sides of the clamp and are perpendicular to the
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31 sides of the clamp.

32
33 On the bottom surface of the clamp (200) recessed grooves
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35 (220) have been placed on the underside of the clamp (Figure 8).
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37 The recessed curved grooves have the following approximate
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39 dimensions: $\frac{3}{16}$ width, $\frac{3}{16}$ diameter with a 1-inch radius. They
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41 are approximately $1 \frac{3}{8}$ inches apart on the underside of the
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43 clamp.

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45 The purpose of the recessed grooves (200) is to allow this
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47 device to be clamped to the top lid of the can so that the cans
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49 are held securely in place by the downward pressure, which is
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1 exerted by the spring (400).
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3 Between the top of the clamp (200) and the underside of the
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5 T-handle, a compression spring (400) is placed to force the clamp
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7 on the top of the cans (Figure 1). Without this spring the cans
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9 would not remain in place.
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11 The specifics of the compression spring are not relevant to
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13 this particular patent; however there must be sufficient downward
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15 pressure on the cans to ensure a tight and secure placement of the
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17 cans in the device.
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19 It is contemplated that this device will be made from
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21 durable, non-corrosive materials including but not limited to
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23 stainless steel, aluminum and molded plastic.
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